

SEQUENCE LISTING



<110> GEMINI SCIENCE, INC.
Takahashi, Nobuaki
Mikayama, Toshifumi

<20> SOLUBLE MAST CELL FUNCTION ASSOCIATED ANTIGEN (MAFA) PHARMACEUTICAL COMPOSITIONS AND METHODS OF MAKING AND USING THEM

<130> 021286/0278719

<140> 09/811,367
<141> 2001-03-16

<150> 60/190,716
<151> 2000-03-17

<160> 20

<170> PatentIn version 3.0

<210> 1
<211> 189
<212> PRT
<213> Homo sapiens

<400> 1

Met Thr Asp Ser Val Ile Tyr Ser Met Leu Glu Leu Pro Thr Ala Thr
1 5 10 15

Gln Ala Gln Asn Asp Tyr Gly Pro Gln Gln Lys Ser Ser Ser Ser Lys
20 25 30

Pro Ser Cys Ser Cys Leu Val Ala Ile Thr Leu Gly Leu Leu Thr Ala
35 40 45

Val Leu Leu Ser Val Leu Leu Tyr Gln Trp Ile Leu Cys Gln Gly Ser
50 55 60

Asn Tyr Ser Thr Cys Ala Ser Cys Pro Ser Cys Pro Asp Arg Trp Met
65 70 75 80

Lys Tyr Gly Asn His Cys Tyr Tyr Phe Ser Val Glu Glu Lys Asp Trp
85 90 95

Asn Ser Ser Leu Glu Phe Cys Leu Ala Arg Asp Ser His Leu Leu Val
100 105 110

Ile Thr Asp Asn Gln Glu Met Ser Leu Leu Gln Val Phe Leu Ser Glu
115 120 125

Ala Phe Cys Trp Ile Gly Leu Arg Asn Asn Ser Gly Trp Arg Trp Glu
130 135 140

Asp Gly Ser Pro Leu Asn Phe Ser Arg Ile Ser Ser Asn Ser Phe Val
145 150 155 160

Gln Thr Cys Gly Ala Ile Asn Lys Asn Gly Leu Gln Ala Ser Ser Cys
165 170 175

Glu Val Pro Leu His Gly Val Cys Lys Lys Val Arg Leu
 180 185

<210> 2
<211> 570
<212> DNA
<213> Homo sapiens

<400> 2

atgactgaca gtgttattta ttccatgtta gagttgccta cggcaaccca agcccagaat	60
gactacggac cacagcaaaa atcttcctct tccaaaggcctt cttgttcttg ctttgtggca	120
ataactttgg ggcttctgac tgcatgttctt ctgagtgtgc tgctataccca gtggatcctg	180
tgccagggct ccaactactc cacttgtgcc agctgtccta gctgcccaga ccgctggatg	240
aaatatggta accattgtta ttatttctca gtggaggaaa aggactggaa ttcttagtctg	300
gaattctgcc tagccagaga ctcacaccc tcgtgtataa cgacaaatca gaaaaatgagc	360
ctgctccaag ttttcctcag tgaggcctt tgctggattg gtctgaggaa caattctggc	420
tggaggtggg aagacggatc acctctaaac ttctcaagga ttcttctaa tagctttgtg	480
cagacatgctgctgcatcaa caaaaatggt cttcaaggct caagctgtga agttccttta	540
cacgggtgt gtaagaaggt cagactttga	570

<210> 3
<211> 188
<212> PRT
<213> Mus musculus

<400> 3

Met Ala Asp Ser Ser Ile Tyr Ser Thr Leu Glu Leu Pro Glu Ala Pro			
1	5	10	15

Gln Val Gln Asp Glu Ser Arg Trp Lys Leu Lys Ala Val Leu His Arg		
20	25	30

Pro His Leu Ser Arg Phe Ala Met Val Ala Leu Gly Leu Leu Thr Val		
35	40	45

Ile Leu Met Ser Leu Leu Met Tyr Gln Arg Ile Leu Cys Cys Gly Ser		
50	55	60

Lys Asp Ser Thr Cys Ser His Cys Pro Ser Cys Pro Ile Leu Trp Thr			
65	70	75	80

Arg Asn Gly Ser His Cys Tyr Tyr Phe Ser Met Glu Lys Lys Asp Trp		
85	90	95

Asn Ser Ser Leu Lys Phe Cys Ala Asp Lys Gly Ser His Leu Leu Thr		
100	105	110

Phe Pro Asp Asn Gln Gly Val Lys Leu Phe Gly Glu Tyr Leu Gly Gln
 115 120 125

Asp Phe Tyr Trp Ile Gly Leu Arg Asn Ile Asp Gly Trp Arg Trp Glu
 130 135 140

Gly Gly Pro Ala Leu Ser Leu Arg Ile Leu Thr Asn Ser Leu Ile Gln
 145 150 155 160

Arg Cys Gly Ala Ile His Arg Asn Gly Leu Gln Ala Ser Ser Cys Glu
 165 170 175

Val Ala Leu Gln Trp Ile Cys Lys Lys Val Leu Tyr
 180 185

<210> 4

<211> 997

<212> DNA

<213> Mus musculus

<400> 4

gtccctcatg gtgtttctca ccccacttac agccccacatt ccccactgag tggaaaggg	60
atttggtaga gatggctgac agctctatct attcaacact agagctgccg gaggcacctc	120
aagtccaaga tgagtccaga tggaaagctca aagctgtctt acaccggccc catctttccc	180
gctttgcaat ggtggcttg gggctttga ctgtgattct catgagtcta ctgatgtatc	240
aacggatcct gtgctgcggc tccaaggact ctacatgttc ccactgcccc agctgcccc	300
tcctctggac gaggaatggc agccactgtt actattttc aatggagaaa aaggactgga	360
attctagtct gaaattctgt gcagacaaag gtcacatct cttacatctt cgggacaacc	420
agggagtgaa gctgtttgga gagtacctgg gtcaggactt ttactggatc ggcttgagga	480
acattgatgg ctggaggtgg gaaggcgccc cagcgctcag cttgaggatt cttaccaaca	540
gcttgataca gaggtgcggt gccattcaca gaaatggcct ccaaggctcc agttgtgaag	600
ttgcttgca gtggatctgt aagaaggccc tataactgtg gatgccactg tggcttgagc	660
ctcggatctg ccacatgtgt taaaaagag ggaatggtc tggggaatct ttgtctacaa	720
atgtgtgtt aacaaatgcc aaacctgtta tgatatgcc ttagacagag gattagcata	780
cctttctggg gttggcctt ttcctgttgg gcttttccg cgactgttta agtattaggc	840
tagccattta aagcctaaat ctgggcaa at caaatgataa agcttattta atggataccc	900
accctgcaga tagccaccct ggctctctca tccttcctct gccatctctg tcaagagaga	960
gaaactatca tcctcagaga tgaccctgctg catcaga	997

<210> 5
<211> 188
<212> PRT
<213> Rattus norvegicus

<400> 5

Met Ala Asp Asn Ser Ile Tyr Ser Thr Leu Glu Leu Pro Ala Ala Pro
1 5 10 15

Arg Val Gln Asp Asp Ser Arg Trp Lys Val Lys Ala Val Leu His Arg
20 25 30

Pro Cys Val Ser Tyr Leu Val Met Val Ala Leu Gly Leu Leu Thr Val
35 40 45

Ile Leu Met Ser Leu Leu Tyr Gln Arg Thr Leu Cys Cys Gly Ser
50 55 60

Lys Gly Phe Met Cys Ser Gln Cys Ser Arg Cys Pro Asn Leu Trp Met
65 70 75 80

Arg Asn Gly Ser His Cys Tyr Tyr Phe Ser Met Glu Lys Arg Asp Trp
85 90 95

Asn Ser Ser Leu Lys Phe Cys Ala Asp Lys Gly Ser His Leu Leu Thr
100 105 110

Phe Pro Asp Asn Gln Gly Val Asn Leu Phe Gln Glu Tyr Val Gly Glu
115 120 125

Asp Phe Tyr Trp Ile Gly Leu Arg Asp Ile Asp Gly Trp Arg Trp Glu
130 135 140

Asp Gly Pro Ala Leu Ser Leu Ser Ile Leu Ser Asn Ser Val Val Gln
145 150 155 160

Lys Cys Gly Thr Ile His Arg Cys Gly Leu His Ala Ser Ser Cys Glu
165 170 175

Val Ala Leu Gln Trp Ile Cys Glu Lys Val Leu Pro
180 185

<210> 6
<211> 1461
<212> DNA
<213> Rattus norvegicus

<400> 6

caccctgctt actgtcgtca ctccctgctg agtgtgaagg gcgttgggtg gagatggccg	60
acaactctat ctactcaaca tttagagctgc ctgctgcacc tcgagtccaa gatgactcca	120
gatggaaggt caaagctgtc ttacaccgac cctgttttc ctaccttgtg atggtggtt	180
tggggctttt gactgtgatt ctcatgagtc tactgttgta ccaacggact ctgtgctgtg	240

gctccaaggg	ctttatgtgt	tcccagtgt	ccaggtgcc	caacctctgg	atgaggaacg	300
ggagccactg	ttactacttc	tcaatggaga	aaagggactg	gaactctagt	ctgaagttct	360
gtgcagacaa	aggctcgcat	ctccttacat	ttccggacaa	ccagggagtg	aacctgttcc	420
aggagtatgt	ggcgaggac	ttttactgga	ttggcttgag	ggacatcgat	ggctggaggt	480
gggaagatgg	cccagctctc	agcttaagca	ttctctctaa	cagcgtggta	cagaagtgtg	540
gcaccatcca	caggtgtggc	ctccacgcct	ccagttgtga	ggttgcttg	cagtggatct	600
gtgagaaggt	cctgcccctga	aggattccac	tgtgtcccaa	gcctcagatc	tgccacatgt	660
cttcaaaaag	agggaatggg	catggggAAC	ctctgttac	aaaggtgtct	ttagcaaatg	720
ccaaacctgt	tatgatatgc	cattagacag	gcgttagcat	tccttcctgg	gagctggcat	780
tttcaactg	ggctttctca	gtcatgttag	ccatttaaag	cctaaatctg	ggcaaatgaa	840
atagataaaa	tttattttga	tggctttac	tgcacaaact	caccctggct	ttctcatccc	900
atactctgcc	atatctatca	aagatatgtg	caaaactatt	catctgcaga	agaacccccca	960
ccacggtaa	taacacatta	catagacatc	gaatagagac	agaaaagcaa	acacccctg	1020
ttctcactcc	tgcttggaaag	ctgaagtagc	tcaaggcctga	ggtgttaggga	gaagtgcagt	1080
ggttaccaga	gtccaggaga	ctgaaggat	ggttagaggtt	ggtaatgg	ttggctggtg	1140
tgggtgacc	atcatgatta	atgattgtt	tatgtttgcc	aatatgttgt	gaacttccgg	1200
atagcgaggt	ggaaggaccg	tgggtttac	caaatgcctg	caggagagat	gtgctgagaa	1260
ccctgactgg	atgatttcca	cacacattga	aatatcacac	tgtccccat	aaatgtgtac	1320
aatcattatc	tatcccta	ttccctaaaa	attaaagaag	tcccaattaa	aataaaaaat	1380
acctttctgc	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1440
aaaaaaaaaa	aaaaaaaaaa	a				1461

<210> 7
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 7

ctttgtatg gtggcttg ggctttgac tg

32

<210> 8
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 8

actgcaaaggc aacctcacaa ctggaggc 28

<210> 9
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 9

atatggatcc tccaaggact ctacatgttc 30

<210> 10
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 10

atatgcggcc gctcagtata ggaccttctt acag 34

<210> 11
<211> 64
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 11

cccgatccg catcaccatc accatcacgc ggccgcttcc aaggactcta catgttccca 60
ctgc 64

<210> 12
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 12

atatgcggcc gctcagtata ggaccttctt acag 34

<210> 13
<211> 73
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 13

cccaagctta caaccatggc tgaccgctct atcgctcaa cagccgagct gccggaggca 60
cctcaagtcc aag 73

<210> 14
<211> 66
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 14

ccccctcgagc tacagatcct cttcagagat gagtttctgc tcgtatagga ccttcttaca 60
gatcca 66

<210> 15
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 15

cgacaactct atctactcaa cactagagct gc 32

<210> 16
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 16

cacagaattt cagactcgag ttccagtcct t 31

<210> 17
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 17

actggaaactc gagtctgaaa ttctgtgcag 30

<210> 18
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 18

ggatgaattc cccgtataagg actttcttac ag 32

<210> 19
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 19

acgaattcac aaccatggcc gacaactcta tctac 35

<210> 20
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 20

ggatgaattc cccgtatagg accttcttac ag

32